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MEMBER REACTIONS TO SUCCESS AND FAILURE  
OF TASK GROUPS

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Communication, Cooperation and Negotiation in Culturally Heterogeneous Groups

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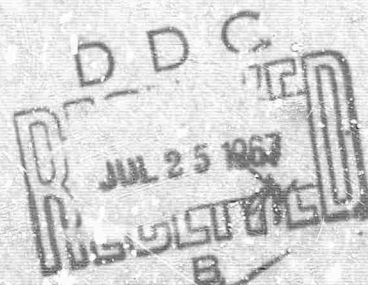
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### A B S T R A C T

A study was conducted to investigate the effect of success and failure on the reactions of high and low status members whose teams differed in linguistic and cultural background and leadership style. The study took place at the European School of Brussels which conducts classes in the four languages of the Common Market nations, that is, in French, German, Italian, and Dutch. Group members participated in a task which required the team to plan the most effective way for two cross-country road races. After completing the tasks, the members were informed by random assignment of their team's performance. They were then asked to describe themselves, their team members, and to react to the experience.

The major difference in member reactions were due to the supposed success or failure of their teams; substantial effects due to leadership style were observed in member reactions in the failure condition to others in the group, indicating that groups of relationship-oriented (high LPC) leaders tended to scapegoat, or project blame onto low-status members of the group, and these groups generally reacted more strongly to group failure than did members of groups having task-oriented (low LPC) leaders. In general, the interpretation suggests itself that relationship-oriented leaders and members of their group find it difficult to cope with the negative evaluation of the experimenter, implied by the rating that the team had performed poorly. In contrast, the task-oriented leader and his group members appear to be more concerned with the satisfaction which is derived from the task, and hence less vulnerable to negative feedback from the experimenter. Contrary to expectation, the differences between homogeneous and heterogeneous were small and insignificant in this study. Only the group atmosphere scores of homogeneous groups were significantly higher, indicating a somewhat more pleasant, relaxed group climate in teams in which all members speak the same language and share the same cultural background. The fact that major differences were not found between homogeneous and heterogeneous groups in this study is likely to be due to the consciously international climate of the school which stresses the need to get along with members from other nations.

Member Reactions to Success and  
Failure of Task Groups<sup>1</sup>

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Most groups obtain periodic evaluations of their task performance. Typically, these evaluations indicate the degree to which the group has succeeded or failed in its assigned task. The way in which group members, being told that their team has failed, respond to these evaluations has important implications for the future career of the group. Some groups respond to such negative evaluations with intensified effort and renewed vigor; others respond with indifference or resentment. In extreme cases, failure experiences may lead to internal dissention, loss of morale and even group disintegration.

The study compares the effects of team failure and of team success on the reactions of group members. It investigates the role of three variables. These are (a) the linguistic and cultural heterogeneity of the group, (b) the leader's style of interacting with his group members, and (c) the individual's status in the group.

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<sup>1</sup>This study was conducted in Belgium while the junior author was Ford Faculty Research Fellow at the University of Louvain. The study was in part supported by the Advanced Research Projects Agency under ARPA Order 454, Contract NR 177-472, Nonr 1834(36), Fred E. Fiedler, Lawrence M. Stolurow, and Harry C. Triandis, Principal Investigators. The authors are indebted to Dr. Albert Pecters, the Director of the European School for permission to conduct this study, and to Dr. Marie Ripoche, the medical director and psychologist of the European School, who assisted in planning and designing this study. We also wish to express our thanks to Mrs. Annie Janssen-Beckers who assisted in administering the questionnaires. We are especially indebted to Gordon O'Brien who performed some of the analyses and assisted in the final preparation of the manuscript.

A number of studies have shown that culturally heterogeneous groups tend to have relatively tense, socially strained interpersonal relations (Fiedler, et al., 1961; Fiedler, 1966a; Rorbauds, 1962; Triandis et al., 1965). Individuals with different linguistic and cultural backgrounds tend to make different implicit assumptions about interpersonal relations (Hall, 1959). Hence, cultural differences typically bring out the latent suspicions, prejudices, and antagonisms which one national and linguistic group has toward another. The frustration of failure is likely to intensify these negative feelings toward members of another culture, and we would expect, therefore, that the group members' reactions to failure would be more severe in culturally heterogeneous than homogeneous groups.

The second variable, leadership style, has been related to a number of important group phenomena, ranging from group performance to group climate scores (Fiedler, 1958, 1964). The research program of which this study is a part, has focussed on two types of leadership styles. These are indicated by the way in which an individual perceives the person with whom he can work least well, his "least preferred coworker" or LPC. A person who describes his least preferred coworker in relatively favorable terms tends to seek good relations with members of his group as well as a prominent position in the group. A person who describes his least preferred coworker in very unfavorable terms tends to be task-oriented: he seeks to obtain satisfaction from performing the task. Individuals with the former style, who are relationship-oriented (high LPC) leaders, tend to be permissive, considerate, and quasi-therapeutic in their interactions with group members. Task-oriented (low LPC) leaders tend to be managing, task-controlling, and more concerned with task related activities than with the feelings and opinions of their group members (Fiedler, 1966 b). Generally the high LPC leaders tend to have a more pleasant group atmosphere, especially

in tense and anxiety producing situations (Fiedler, 1964). This study explored whether groups with relationship-oriented leaders would differ in their reactions to failure from groups with task-oriented leaders.

The third variable which this study considers is the individual's status within the group. It is obvious that the leader assumes more responsibility for the task; he is given a greater share of the praise or blame for his group's performance, and that most leaders, therefore, feel more involved in the task than do their members. Group members should, therefore, respond differently to high and to low status members in successful and unsuccessful groups.

The dependent variables in this study were designed to measure the effect of failure on group members under the various experimental conditions. The individual may respond to the failure of his group by simply feeling that the entire experiment or the task was irrelevant and meaningless. He may react by projecting the blame onto his fellow group members, as indicated by a low evaluation of them, or he may react introjectively by introjecting blame and, therefore, lowering his self-esteem. The last of these probably is personally the most maladjustive of these responses. Extrajudicially lowering his esteem and evaluation of his coworkers is a reaction which is potentially most destructive or divisive of the team. Expressing a low evaluation of the task or of the experiment protects his team members as well as himself, but this impulsive reaction would seem least likely to improve task performance. Which of these types of reactions will be called forth by various types of groups is a problem of considerable moment when we are concerned with the continuing team performance and with long range adjustment of group members.

## Method

### Subjects

The experiment was conducted at the "European School of Brussels." The subjects of this experiment were 75 male students in the ninth, tenth, and eleventh grades; the average ages in these grades were, respectively, 15, 16, and 17 years.<sup>2</sup>

The school offers instruction in four different languages, namely, German, Dutch, French, and Italian. It is attended by children of officials and functionaries of the six common market nations of France, Germany, Italy, Belgium, Holland, and Luxemburg, as well as by children of diplomatic personnel accredited to the Common Market in Brussels.

Group heterogeneity. The test of the first hypothesis requires a comparison of culturally and linguistically homogeneous and heterogeneous groups. The homogeneous groups in this study consisted of three members with similar linguistic and cultural backgrounds. The German and Italian groups consisted of boys from Germany and Italy, respectively. Dutch-speaking groups contained boys from Holland as well as from the Flemish part of Belgium. The French groups contained French boys as well as French-speaking Belgians, Luxemburgers, and a scattering of pupils from other nations.

In contrast, heterogeneous groups consisted of three members from different nationalities, each also belonging to a different linguistic system. In order to obtain maximum heterogeneity, a distinction was made between the Germanic and the Romance language groups, that is, Dutch and German versus French and Italian, respectively. Heterogeneous groups were assembled so that the leader always belonged to a different language group from that

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<sup>2</sup>For administrative reasons, all available students, girls as well as boys, were included in the testing and experimental procedures. However, the analyses were performed with male groups, only.



of his members. Insofar as possible, a French or Italian leader would thus be grouped with one Dutch and one German member; a Dutch or German leader would be grouped with one Italian and one French member.

Leadership style. The study, in part, attempted to determine the effect of different leadership styles on member reactions to group failure. Leadership styles were identified by means of the esteem with which a person describes his least preferred coworker (LPC). The individual is asked to think of all the persons with whom he has ever worked. These may be persons he knows at the time, or those he knew in the past. He is then asked to think of the one person with whom he had most difficulty in working on a common task, and to describe this person on a 17-item bipolar adjective scale, containing items as illustrated below:

Pleasant : ~~8~~ : ~~7~~ : ~~6~~ : ~~5~~ : ~~4~~ : ~~3~~ : ~~2~~ : ~~1~~ : Unpleasant

Quarrelsome : ~~1~~ : ~~2~~ : ~~3~~ : ~~4~~ : ~~5~~ : ~~6~~ : ~~7~~ : ~~8~~ : Harmonious

The 17 items are then summed to yield the LPC score of the individual. As indicated above, an individual who rates his least preferred coworker in a relatively favorable manner has a high LPC score, one who rates his least preferred coworker in a very unfavorable manner has a low LPC score. The LPC scores as well as other pre-test questionnaires were obtained three weeks prior to this experiment. Note, therefore, that the individual, in all likelihood, would not have described a group member with whom he worked in the experiment proper. Based on the pre-tests the leaders were then divided into those having high and low LPC scores. The instructions for this and all other questionnaires were given in the student's mother tongue, that is, in French, Italian, German, or Dutch.

Status. Group members were divided into three different status categories to test the effect of group member status on reaction to group success or failure. Each of the groups was assembled so that it contained

one high status member, the leader, assigned on the basis of his LPC score, and one middle status, and one low status member. The high status members were eleventh grade students who were appointed as leaders. The tenth graders were assumed to have intermediate status, and the ninth grade students were considered to have lowest status. These lower status members were assigned to groups at random. Grade and age differences are of greater importance in European than in American schools and the evidence from related studies indicates that the older students in the upper classes have correspondingly greater status than do younger students in the lower grades. The analyses are concerned with the relative status among group members as perceived by the rater. Thus, for the leader (11th grade), Member B (tenth grade) had higher status than Member C (ninth grade); for Member B, the leader had high status but Member C had low status; and for Member C, the leader had relatively high status, but Member B had relatively lower status.

### Procedure

Motivation of subjects. A pre-test was given in a big assembly hall of the European School where the senior author explained the general purpose of the experiment and invited the students to participate. Particular stress was laid on the need for understanding how multi-national groups operate, and the possible contribution of this experiment to such understanding. Since most students were children of Common Market functionaries, this point struck a responsive chord.

As a further means to insure good cooperation, the experimenter explained that each participant would have a chance to draw a prize. This prize was, however, in no way related to how well the groups performed, or to the specific answers which the students would give to the questionnaires. This method of motivating the students was adapted in order to prevent a

confounding effect between reactions to rewards and attitudes, especially since students from different national and cultural backgrounds tend to react differently to rewards of this nature. Some would have viewed it as an attempt to bribe them, others would have welcomed a monetary reward, still others would have refused to participate for pay. (See Schachter, et al., 1954).

Group tasks. Each group performed two parallel tasks described as planning a route for a cross-country auto race. The members were given a road map and a time table and instructed to find the fastest way to get from the starting point to the point of destination. Each task lasted 25 minutes. The task was a highly structured problem in which the rules were specified and the goal clearly stated. Groups were randomly assigned to a success and a failure condition.

After the tasks were completed, the subjects were told that a panel of judges would evaluate their work, and that the results would be known in a few minutes. To prevent members of different groups from discussing the task, the subjects were assigned to individual tables where they completed various questionnaires while awaiting the results.

After about ten minutes each subject received a note which indicated either that the group had performed poorly (failure condition) or that the group had performed very well (success condition). Immediately after receiving the evaluation of his group's performance, each subject made the ratings which served as criteria.

To recapitulate, the design called for homogeneous and heterogeneous groups under high and low LPC leaders with half the groups in the success and half in the failure condition. The design of the experiment is shown in Table 1. The actual numbers of groups for which complete data were available are given in parentheses.

Table 1  
Design of the Experiment

|                 | Culturally Homogeneous |         | Culturally Heterogeneous |         |
|-----------------|------------------------|---------|--------------------------|---------|
|                 | Success                | Failure | Success                  | Failure |
| High LPC Leader | 4 (3)                  | 4 (3)   | 4 (4)                    | 4 (2)   |
| Low LPC Leader  | 4 (3)                  | 4 (4)   | 4 (3)                    | 4 (3)   |

Number of groups which were actually included in the analysis are shown in parenthesis.

### Criterion Variables Measuring Reaction to Success and Failure

The effects of the experimental procedures were evaluated by a series of post-session questionnaires. After informing the subjects of the success or failure of their group, they were asked to complete a questionnaire evaluating or rating (a) other members of the group, (b) the task itself, (c) the importance of the results, (d) themselves, and (e) their satisfaction with the experiment. These five ratings are described below.

Global evaluation of partners. Each subject was first asked to indicate his feelings toward each of his partners by marking a 100-point scale. The value of "100" indicated a feeling which was maximally favorable, while a rating of "0" indicated the most unfavorable feeling. A rating of "50" indicated a feeling of complete indifference.

Semantic Differential Evaluations. Each subject described each of his two fellow group members on the same 17 item scale which had been used for describing his least preferred coworker. In order to make the scale maximally evaluative, only the six items with highest loadings on the evaluation factor were used for this purpose. These items were agreeable-disagreeable; friendly-unfriendly; accepting-rejecting; distant-close; cold-warm; interesting-boring. The average intercorrelation among these six evaluative items was .53, yielding an estimated reliability, corrected for length, of .87.

Group Atmosphere. Each member completed a 10 item scale, similar in form to the Semantic Differential, to describe the general atmosphere of the group session in such terms as pleasant-unpleasant; friendly-unfriendly; bad-good.<sup>3</sup>

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<sup>3</sup> Other items in this scale were, worthless-valuable; distant-close; cold-warm; quarrelsome-harmonious; self-assured-hesitant; efficient-inefficient; gloomy-cheerful.

Feelings about the task. Several questionnaire items evaluated the subject's opinion about the appropriateness of the task. A task-depreciation score was obtained by summing scores for three items. Each of the items was scored on an eight-point bi-polar scale with points ranging from "absolutely true" to "absolutely untrue," namely,

These tasks are not worth getting deeply involved in.

|            |   |              |   |              |   |              |   |              |   |              |   |              |   |              |   |              |   |        |
|------------|---|--------------|---|--------------|---|--------------|---|--------------|---|--------------|---|--------------|---|--------------|---|--------------|---|--------|
| Absolutely |   |              |   |              |   |              |   |              |   |              |   | Absolutely   |   |              |   |              |   |        |
| true       | : | <del>8</del> | : | <del>7</del> | : | <del>6</del> | : | <del>5</del> | : | <del>4</del> | : | <del>3</del> | : | <del>2</del> | : | <del>1</del> | : | untrue |

This kind of work is too artificial.

It was difficult to become strongly interested in this type of task.

Three similar questionnaire items indicated the individual's evaluation of the importance of the task. These were:

These experiments made me wish to belong to the group which would get the best results.

This kind of scientific experiment is very useful to mankind.

I felt it was important for my group to obtain good results.

A satisfaction with the experiment score indicating, also by summing, scores from the following three items:

This small group experiment was interesting.

I am glad I participated in this experiment.

I would like to participate in another similar experiment.

Self-evaluation. A score was obtained by asking each participant to assess his own part in the experiment. Six items were summed to obtain this score. These were:

1. The favorable influence I had over the other members to obtain good results was . . .

|      |   |              |   |              |   |              |   |              |   |              |   |              |   |              |   |              |   |       |
|------|---|--------------|---|--------------|---|--------------|---|--------------|---|--------------|---|--------------|---|--------------|---|--------------|---|-------|
| very |   |              |   |              |   |              |   |              |   |              |   | very         |   |              |   |              |   |       |
| weak | : | <del>1</del> | : | <del>2</del> | : | <del>3</del> | : | <del>4</del> | : | <del>5</del> | : | <del>6</del> | : | <del>7</del> | : | <del>8</del> | : | great |

2. The cooperation I gave in order to get good results was . . .
3. The motivation I had to succeed was . . .

4. My aptitudes in working within a group were . . .
5. The enthusiasm I displayed to make these tasks successful was . . .
6. For the type of work found in this experiment, my aptitudes were . . .

The three types of criterion scores were positively intercorrelated. Correlations of the three intermember evaluations ranged from .59 to .74; the other correlations were considerably lower and indicated the need for treating these separately in the analyses. Table 2 presents the intercorrelations of criterion scores in the failure condition.

### Results

Global evaluation of partners. This set of analyses deals with the individual's reactions to others in his group as a result of group success or group failure. The analysis required equal numbers of groups in each treatment condition. However, data from seven groups were incomplete, leaving an unequal number of scores per cell. The unweighted means technique (Miner, 1962) was used for the analysis of variance. A five factor design (type III, Lindquist, 1956) was used for all analyses except for the analysis of Group Atmosphere scores which had a four factor design.

Table 3 summarizes the analyses of variance which indicate the effects of success and failure, leadership style, and group member status on the individual's evaluation of others and of the group. The significant main effects and interactions are shown in Table 3. As can be seen, success, leadership style and status of the member affected the ratings. Interestingly enough, the group's homogeneity or heterogeneity did not affect the individual's reactions to others.

Table 4 presents the means of the evaluation indices. As can be seen, in the failure condition, groups with high LPC leaders had much lower evaluation scores than did groups with low LPC leaders. In the success condition, the difference between groups with high and low LPC leaders was

Table 2

Correlation Between Dependent Variables for  
all the Subjects whose Group has Failed  
(N = 36)

| G.A.                                       | Ev. I.<br>Sup.S. | Ev. I<br>Inf.S.   | Ev. II<br>Sup.S.  | Ev. II<br>Inf.S.  | Task Dep.<br>Results | Imp. of<br>Eval. of<br>Self | Satis-<br>faction |      |                    |
|--|------------------|-------------------|-------------------|-------------------|----------------------|-----------------------------|-------------------|------|--------------------|
| Group Atmosphere                           | --               | .61 <sub>xx</sub> | .61 <sub>xx</sub> | .39 <sub>x</sub>  | .60 <sub>xx</sub>    | -.11                        | .09               | .26  | .19                |
| Evaluation - Global<br>Superior Status     | --               | --                | .51 <sub>xx</sub> | .70 <sub>xx</sub> | .34 <sub>x</sub>     | -.32                        | .12               | .11  | .26                |
| Evaluation - Global<br>Inferior Status     | --               | --                | --                | .18               | .74 <sub>xx</sub>    | -.38 <sub>x</sub>           | .31               | .00  | .27                |
| Evaluation - Sem. Diff.<br>Superior Status | --               | --                | --                | --                | .24                  | -.08                        | -.04              | .22  | .27                |
| Evaluation - Sem. Diff.<br>Inferior Status | --               | --                | --                | --                | --                   | -.12                        | .27               | .11  | .11                |
| Task Depreciation                          | --               | --                | --                | --                | --                   | --                          | -.22              | -.24 | -.49 <sub>xx</sub> |
| Importance of<br>Results                   | --               | --                | --                | --                | --                   | --                          | --                | -.03 | .37 <sub>x</sub>   |
| Evaluation of<br>Self                      | --               | --                | --                | --                | --                   | --                          | --                | --   | .27                |

NOTE: Product-Moment Correlation

xx p < .01

x p < .05



Table 3

Summaries of Analyses of Variance for  
the Three Intermember Evaluation Indices

| Sources                              | Global Evaluation |        |         | Semantic Differential Evaluation |        |       | Group Atmosphere |        |         |
|--------------------------------------|-------------------|--------|---------|----------------------------------|--------|-------|------------------|--------|---------|
|                                      | df                | MS     | F       | df                               | MS     | F     | df               | MS     | F       |
| Between Ss                           |                   |        |         |                                  |        |       |                  |        |         |
| Success-Failure (A)                  | 1                 | 2187.8 | 6.39*   | 1                                | 60.24  | 1.08  | 1                | 1660.1 | 12.39** |
| Homogeneity-Heterogeneity (B)        | 1                 | 43.28  | ----    | 1                                | 0.00   | ----  | 1                | 0.07   | ----    |
| LPC (C)                              | 1                 | 3826.2 | 11.17** | 1                                | 128.11 | 2.29  | 1                | 1069.2 | 7.98**  |
| Status of Member Evaluating (D)      | 2                 | 521.65 | 1.52    | 2                                | 172.19 | 3.07  | 2                | 218.69 | 1.53    |
| AxB                                  | 1                 | 43.77  | ----    | 1                                | 12.65  | ----  | 1                | 2.60   | ----    |
| BxC                                  | 1                 | 228.08 | ----    | 1                                | 15.06  | ----  | 1                | 234.37 | 1.75    |
| AxC                                  | 1                 | 1795.7 | 5.24*   | 1                                | 376.47 | 6.72* | 1                | 1108.2 | 8.27**  |
| AxB                                  | 2                 | 398.84 | 1.16    | 2                                | 5.17   | ----  | 2                | 110.23 | ----    |
| BxD                                  | 2                 | 149.24 | ----    | 2                                | 1.39   | ----  | 2                | 62.26  | ----    |
| CxD                                  | 2                 | 84.11  | ----    | 2                                | 11.104 | ----  | 2                | 97.79  | ----    |
| AxBxC                                | 1                 | 177.62 | ----    | 1                                | 10.45  | ----  | 1                | 43.42  | ----    |
| BxCxD                                | 2                 | 364.52 | 1.06    | 2                                | 6.53   | ----  | 2                | 43.52  | ----    |
| AxCxD                                | 2                 | 395.49 | 1.15    | 2                                | 75.58  | 1.35  | 2                | 25.98  | ----    |
| AxBxD                                | 2                 | 122.42 | ----    | 2                                | 0.33   | ----  | 2                | 169.05 | 1.26    |
| AxBxCxD                              | 2                 | 378.37 | 1.10    | 2                                | 50.62  | ----  | 2                | 0.56   | ----    |
| Error (b)                            | 44                | 342.48 |         | 50                               | 56.02  |       | 50               | 134.00 |         |
| Within Ss                            |                   |        |         |                                  |        |       |                  |        |         |
| Status of Member Being Evaluated (E) | 1                 | 1153.7 | 12.26** | 1                                | 55.33  | 2.58  |                  |        |         |
| AxE                                  | 1                 | 251.97 | 2.68    | 1                                | 1.47   | ----  |                  |        |         |
| BxE                                  | 1                 | 0.31   | ----    | 1                                | 22.75  | 1.06  |                  |        |         |

Table 3 (Continued)

|           |    |        |      |    |       |       |  |  |  |
|-----------|----|--------|------|----|-------|-------|--|--|--|
| CxE       | 1  | 4.10   | ---- | 1  | 3.46  | ----  |  |  |  |
| DxE       | 2  | 271.15 | 2.88 | 2  | 20.96 | ----  |  |  |  |
| BxDxE     | 2  | 75.60  | ---- | 2  | 7.65  | ----  |  |  |  |
| CxDxE     | 2  | 294.05 | 3.13 | 2  | 61.37 | 2.87  |  |  |  |
| AxBxE     | 1  | 3.21   | ---- | 1  | 55.31 | 2.58  |  |  |  |
| CxBxE     | 1  | 128.17 | 1.36 | 1  | 37.75 | 1.76  |  |  |  |
| AxCxE     | 1  | 85.35  | ---- | 1  | 94.11 | 4.39* |  |  |  |
| AxDxE     | 2  | 178.94 | 1.90 | 2  | 83.65 | 3.91  |  |  |  |
| BxCxDxE   | 2  | 44.20  | ---- | 2  | 26.00 | 1.21  |  |  |  |
| AxCxDxE   | 2  | 46.31  | ---- | 2  | 4.21  | ----  |  |  |  |
| AxBxDxE   | 2  | 0.32   | ---- | 2  | 5.67  | ----  |  |  |  |
| AxBxCxE   | 1  | 25.35  | ---- | 1  | 61.51 | 2.87  |  |  |  |
| AxBxCxDxE | 2  | 210.95 | 2.24 | 2  | 56.73 | 2.65  |  |  |  |
| Error (w) | 44 | 94.08  |      | 50 | 21.42 |       |  |  |  |

\* p &lt; .05

\*\* p &lt; .01

Table 4

Means of the Evaluations Given by the Group Members

|                                | Failure                   | Success      |
|--------------------------------|---------------------------|--------------|
| <u>Evaluation (Global)</u>     |                           |              |
| High LPC Leader                | 61.35 (N=14) <sup>x</sup> | 77.02 (N=20) |
| Low LPC Leader                 | 78.73 (N=17)              | 80.76 (N=17) |
| <u>Evaluation (Sem. Diff.)</u> |                           |              |
| High LPC Leader                | 31.71 (N=14)              | 36.98 (N=21) |
| Low LPC Leader                 | 37.57 (N=21)              | 35.52 (N=18) |
| <u>Group Atmosphere</u>        |                           |              |
| High LPC Leader                | 55.80 (N=15)              | 67.65 (N=20) |
| Low LPC Leader                 | 66.24 (N=21)              | 67.78 (N=18) |

<sup>x</sup>N = Number of Subjects. (N varies because of missing and incomplete data.)

slight and not significant. Thus, individuals working with relationship-oriented leaders reacted much more strongly, and in a seemingly extra-punitive manner, toward fellow group members when they were told that their group had failed.

The effect of the group member's status on his evaluation by others can best be seen in Figure 1. Significant differences occurred only in groups with high LPC leaders. While the low status member in these groups was evaluated very unfavorably when the group failed, he was rated quite favorably in the success condition. There were no significant differences in the evaluations which higher status leaders received in groups of high and of low LPC leaders. In unsuccessful groups of low LPC leaders, the low status members were evaluated as favorably as the high status members (Figure 2). In other words, the low status member served as a scapegoat in unsuccessful groups led by high LPC leaders but not in groups led by low LPC leaders.

On the other hand, the group member with middle status (tenth grade) rated his partner quite differently in the failure condition, irrespective of leader LPC. The mean rating given to the leader in the failure condition was 38.0 while that given to the low status member was 32.4 ( $p < .05$ ). The difference between ratings of leaders and of low status members in the success condition were smaller and non-significant.

The ratings for each index, Task Depreciation, Importance of Results, Satisfaction, and Evaluation of Own Performance, were submitted to separate analyses of variance, using Winer's unweighted means technique. The classical ANOVA model for four factors was used: Success vs. failure; homogeneity vs. heterogeneity; high vs. low leader LPC; and high vs. low status of the evaluator.

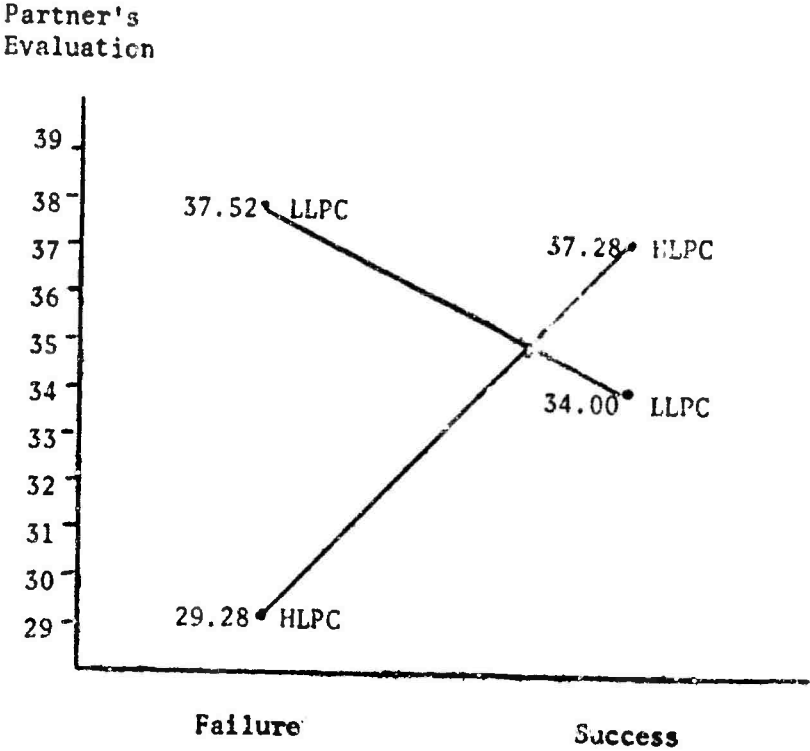


Figure 1. Semantic differential evaluation ratings for low status members under conditions of success and failure.

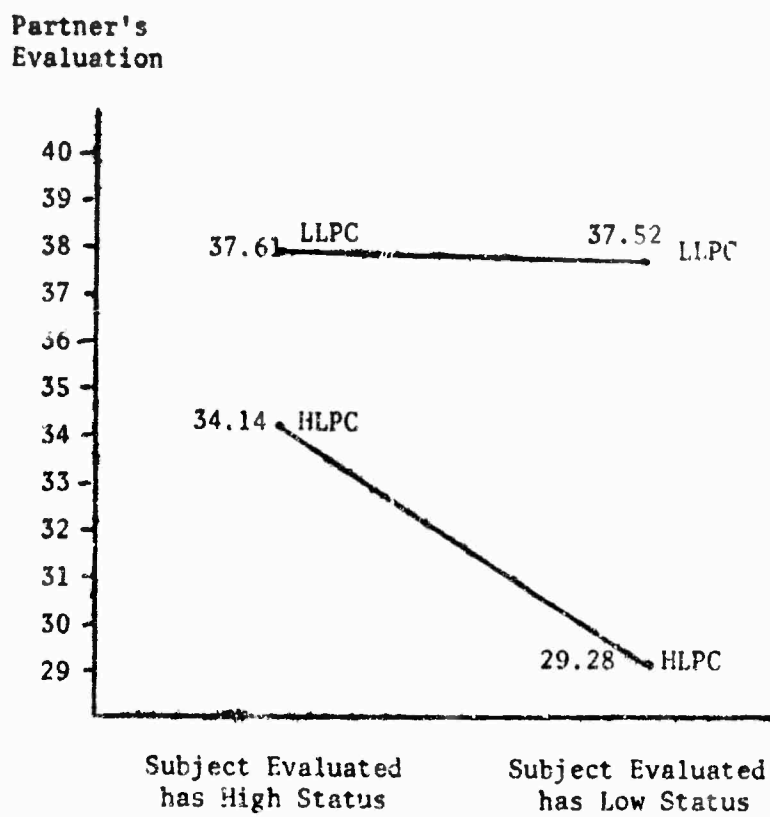


Figure 2. Semantic differential evaluation ratings of group members with high and low status in the failure condition.

Task Depreciation. As might be expected, group members depreciated the task more when told that their group had failed than when it had succeeded. This difference between the failure and the success group (12.88 and 10.39, respectively) was significant at the .01 level ( $F = 8.11$ ,  $df\ 1/50$ ). In other words, all subjects had a tendency to consider the task meaningless and unimportant when their group had failed.

There was no significant interaction between success and failure with the leadership style score, the composition of the group, or the group member's status. However, the leader's LPC score correlated highly with task depreciation only under the group failure condition (.67,  $p < .02$ ) but not when the group was supposedly successful (.12). Again we found, therefore, that the high LPC leader responded more strongly than the low LPC leader to being told that his group had failed.

Importance of results to the group members. The difference between member ratings in supposedly successful and unsuccessful groups were marked and significant (15.75 and 12.38 for successful and unsuccessful groups, respectively;  $F = 9.74$ ,  $df\ 1/50$ ;  $p < .005$ ). Thus, again, members of successful groups considered the results more important than did members of groups which were supposedly unsuccessful. This indicates a generally impunitive response. Other effects were not significant.

Evaluation of own performance. Evaluation of own performance was greater for all members of successful than unsuccessful groups (37.07 versus 32.88;  $F = 10.50$ ;  $df\ 1/50$ ;  $p < .005$ ). Other effects were not significant.

Satisfaction. Group members were more satisfied with their experience when the group succeeded than when it failed (18.65 versus 16.66;  $F = 3$ ;  $df\ 1/50$ ;  $p < .05$ ). Only in this case did the members of homogeneous groups give more favorable ratings than did members of heterogeneous groups (19.17 versus 16.02;  $F = 9.30$ ;  $df\ 1/50$ ,  $p < .005$ ). This result supports previous findings by Rombauts (1962), Fiedler (1966) and Triandis et al. (1965).

In general, therefore, these results indicate that the heterogeneity in national and linguistic background of group members played a very minor part in this experiment.

### Discussion

This experiment compared the reactions to group success and failure by high and low status individuals in groups having different member composition and leaders with different leadership styles. The supposed group success or failure was clearly the most important factor in determining the group members' reactions to the experience on each of the dependent variables. The effects were quite marked and again indicate the importance of success and failure even in an experimental situation in which the individual cannot expect either reward or punishment. (It will be recalled, that the reward consisted of a chance to win one of a number of prizes and was quite independent of group success or failure, and even of active or enthusiastic participation in the experiment.)

We had expected that group composition would play an important role in affecting group member reactions. This was clearly not the case. The only one significant finding was that homogeneous groups were more satisfied with the group situation than were heterogeneous groups. The most plausible explanation for this weak effect may lie in the philosophy of the European School which emphasizes the importance of getting along with persons of different cultural background and understanding their values and interests. Moreover, the students in the school continually work with other "Europeans" and they may well have learned to respond in an adaptive manner to the frustrations of working in heterocultural groups. Research with other heterocultural groups (Fiedler, 1966 a; Rorbauds, 1962; Triandis et al., 1965) suggests that reactions to success and failure in heterogeneous groups might have been considerably more marked for subjects who were inexperienced in cross-cultural exchanges.



Previous work had led us to expect that members of groups with relationship-oriented (high LPC) leaders would have reacted more adjustively and less extrapunitively than would members in groups with task-oriented (low LPC) leaders. There was, indeed, a very slight and non-significant tendency on the part of high LPC leaders to create more congenial groups in the success condition. However, quite the contrary occurred in groups in which the members were informed that they had failed. Members of groups with high LPC leaders reacted very negatively to group failure and they evaluated low status members significantly less favorably when the group failed than when it was supposedly successful, placing them in the role of scapegoat. In particular, the high LPC leader's reactions to success and to failure were quite marked, while the low LPC leader's reactions were relatively minor.

We propose the following interpretation of these findings: It should be recalled that the leaders were given the group performance results by the experimenter after the task had been completed. The task-oriented, low LPC, leader's reaction to this information was very minor. In other words, the low LPC leader acted as if he did not particularly care what the experimenter thought of him and his group. The high LPC leader, on the other hand, reacted quite markedly. We interpret this to mean that the relationship-oriented, high LPC, leader's esteem of himself and of his group members was strongly affected by what the experimenter told him.

While one might interpret these findings as indicating that the high LPC leader was more concerned with the task than was the low LPC leader, it seems more likely that the high LPC leader was more concerned with the way his group's failure reflected upon him. Since the low LPC leader, by this interpretation, may have obtained intrinsic satisfaction from having performed the task, the evaluation of the experimenter did not greatly affect his evaluation of his coworkers in one way or another.

Finally, the status of group members did not show significant differences in their evaluations of other group members under conditions of success or failure. However, the middle status member rated his partners quite differently in the failure condition than in the success condition. His evaluation of the leader was relatively favorable, regardless of the group's success or failure, but he rated the lower status member quite unfavorably when his group failed. This finding suggests that the middle status member tends to identify strongly with the leader of his group, and that he attempts to differentiate himself from the low status member. When the group is successful this differentiation is not very important since success does not present a threat to the middle status member. When the group failed, the middle status member might well face the dilemma of having to reject his leader, who is older and has higher status in the school community, or having to reject the low status member who is younger and can be rejected without difficulty. When told of the group's failure, the middle status member appears to handle his frustration by attributing the cause of the failure to the low status member rather than to a lack of ability in himself or on the part of the leader.

### Summary

A study conducted at the European School of Brussels investigated the effects of (a) cultural and linguistic homogeneity among team members; (b) team member status; and (c) leadership style, on team member reactions to success and failure. Group members worked on tasks requiring them to plan the shortest route for two cross-country autoraces. They were then assigned at random to a success and a failure condition. Their subsequent evaluations of the task, of one another, and of themselves were compared. The most important differences in reactions appeared to be due to supposed task success or failure, and a main effect was observed indicating that the leadership style affected group atmosphere and evaluation of group members. Specifically, groups with relationship-oriented leaders tended to project blame on the low-status member of the group in the failure condition. The group homogeneity or heterogeneity had relatively little effect in this study except for significantly higher group atmosphere scores in culturally homogeneous than heterogeneous groups.

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### 13. ABSTRACT

A study was conducted to investigate the effect of success and failure on the reactions of high and low status members whose teams differed in linguistic and cultural background and leadership style. The study took place at the European School of Brussels which conducts classes in the four languages of the Common Market nations, that is, in French, German, Italian, and Dutch. Group members participated in a task which required the team to plan the most effective way for two cross-country road races. After completing the tasks, the members were informed by random assignment of their team's performance. They were then asked to describe themselves, their team members, and to react to the experience.

The major difference in member reactions were due to the supposed success or failure of their teams; substantial effects due to leadership style were observed in member reactions in the failure condition to others in the group, indicating that groups of relationship-oriented (high LPC) leaders tended to scapegoat, or project blame onto low-status members of the group, and these groups generally reacted more strongly to group failure than did members of groups having task-oriented (low LPC) leaders. In general, the interpretation suggests itself that relationship-oriented leaders and members of their group find it difficult to cope with the negative evaluation of the experimenter, implied by the rating that the team had performed poorly. In contrast, the task-oriented leader and his group members appear to be more concerned with the satisfaction which is derived from the task, and hence less vulnerable to negative feedback from the experimenter. Contrary to expectation, the differences between homogeneous and heterogeneous were small and insignificant in this study. Only the group atmosphere scores of homogeneous groups were significantly higher, indicating a somewhat more pleasant, relaxed group climate in teams in which all members speak the same language and share the same cultural background. The fact that major differences were not found between homogeneous and heterogeneous groups in this study is likely to be due to the consciously international climate of the school which stresses the need to get along with members from other nations.

### 14. KEY WORDS

Success in Teamwork  
Failure in Teamwork  
Task groups  
Leadership style  
Relationship-oriented leaders  
Task-oriented leaders  
Heterocultural teams

Member Reactions to Success and  
Failure of Task Groups

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A B S T R A C T

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